

Joseph Masiero

Curriculum Vitae

CONTACT INFORMATION	Jet Propulsion Lab 4800 Oak Grove Dr M/S 183-601 Pasadena, CA 91109 USA	<i>Cell:</i> (626) 817-2184 <i>E-mail:</i> joseph.masiero@jpl.nasa.gov <i>WWW:</i> http://science.jpl.nasa.gov/people/Masiero
RESEARCH INTERESTS	Asteroid albedos and diameters Numerical simulations of Solar system evolution Imaging polarimetry Thermal models of Solar system objects Polarimetric instrumentation and characterization Education & public outreach	
EDUCATION	University of Hawaii at Manoa , Honolulu, HI USA Ph.D., Institute for Astronomy, September 2009 <ul style="list-style-type: none">• Thesis Topic: <i>“Using rotation and polarization to probe the composition and surface properties of main belt asteroids”</i>• Advisor: Dr. Robert Jedicke M.S., Institute for Astronomy, December 2006	
	The Pennsylvania State University , State College, PA USA B.S., Astronomy & Astrophysics, June 2004	
EMPLOYMENT	Scientist Jet Propulsion Laboratory NASA Postdoctoral Fellow Jet Propulsion Laboratory Research Assistant Institute for Astronomy University of Hawaii Teaching Assistant Dept of Physics and Astronomy University of Hawaii Research Assistant Dept of Astronomy & Astrophysics Pennsylvania State University	Oct 2012 to present Oct 2009 to Sept 2012 May 2005 to Sept 2009 Aug 2004 to May 2005 Jan 2001 to Aug 2004
STUDENT ADVISING	Mario Cabrera, JPL Undergraduate Internship mentor Greta Cukrov, Undergraduate Internship co-mentor Elizabeth Clyne, Undergraduate Internship co-mentor Carrie Nugent, Graduate Internship co-mentor Mario Cabrera, CAMPARE Undergraduate Internship co-mentor	Summer 2013-Fall 2013 Summer 2013 Spring 2013 Summer 2012-Fall 2012 Summer 2011

Wenli Mo, Undergraduate Internship co-mentor	Summer 2011-Spring 2012
Jessica Watkins, Graduate Internship co-mentor	Summer 2011
Emma Hand, Undergraduate Internship co-mentor	Spring 2011
Erin Blauvelt, Undergraduate Internship co-mentor	Spring 2011
Emily DeBaun, Undergraduate Internship co-mentor	Fall 2010
Ashlee Wilkins, Undergraduate Internship co-mentor	Summer 2010
Dillon Elsbury, High School Internship co-mentor	Summer 2010
Tommy Gautier, High School Internship co-mentor	Summer 2010
Stephanie Gomillion, Undergraduate Internship co-mentor	Spring 2010

SUCCESSFUL GRANTS AND PROPOSALS

Co-author on the proposal for the 2010 Discovery-class mission NEOCam, the Near-Earth Object Camera. NEOCam was awarded technology development funding as a result of this proposal.

Science PI for 2012 NASA Planetary Geology and Geophysics proposal: “Studying the Origin and Evolution of Main Belt Asteroid Families” - Funded at \$150K over two years.

TEACHING

Learning Works Astronomy team-teacher, Learning Works School Pasadena	Fall 2013
Inquiry-based photometer lab for Electro-Optics Class, Maui Community College	3 & 5 March 2008
Teaching Assistant, Dept of Physics and Astronomy, University of Hawaii	Aug 2004 to May 2005
“Mission to Mars” Instructor, Action Potential Science Experience, Pennsylvania State University	Jul 2004
Teaching Assistant, Duke Talent Identification Program at the Pisgah Astronomical Research Institute, Rosman, NC	Jun 2004
Teaching Assistant, Duke Talent Identification Program at the Pisgah Astronomical Research Institute, Rosman, NC	Jun 2003

PROFESSIONAL SERVICE

Member on 3 NASA ROSES review panels **Jan 2012-Aug 2013**

TEACHING WORKSHOPS

CfAO Professional Development Program (Inquiry Method of Teaching Science)	1-7 Jan 2007
NASA Center for Astronomy Education Workshop	20-23 Jun 2005

RESEARCH WORKSHOPS

JPL’s Planetary Science Summer School, 2007 A New Frontiers-class mission design for comet sample return: <i>The Wirtanen Analysis and Surface Probe (WASP)</i>	23-27 Jul 2007
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PUBLICATIONS

Refereed Publications

- Ganguly, R.; Lynch, R.S.; Charlton, J.C.; ...; **Masiero, J.R.**; et al.; “*A census of quasar-intrinsic absorption in the Hubble Space Telescope archive: systems from high-resolution echelle spectra*”. 2013, MNRAS, in press.
- Bauer, J.M.; Grav, T.; Blauvelt, E.; Mainzer, A.K.; **Masiero, J.R.**; Stevenson, R.; et al.; “*Centaurs and Scattered Disk Objects in the Thermal Infrared: Analysis of WISE/NEOWISE Observations*”. 2013, ApJ, 773, 22.
- **Masiero, J.R.**; Mainzer, A.K.; Bauer, J.M.; Grav, T.; Nugent, C.R.; Stevenson, R.; “*Asteroid Family Identification Using the Hierarchical Clustering Method and WISE/NEOWISE Physical Properties*”. 2013, ApJ, 770, 7.
- Herenz, P.; Richter, P.; Charlton, J.C.; **Masiero, J.R.**; “*The Milky Way halo as a QSO absorption-line system. New results from an HST/STIS absorption-line catalogue of Galactic high-velocity clouds*”. 2013, A&A, 550, A87.
- Mainzer, A.; Grav, T.; **Masiero, J.R.**; Bauer, J.; et al.; “*Physical Parameters of Asteroids Estimated from the WISE 3 Band Data and NEOWISE Post-Cryogenic Survey*”. 2012, ApJL, 706, 12.
- Stevenson, R.; Kramer, E.A.; Bauer, J.M.; **Masiero, J.R.**; Mainzer A.; “*Characterization of Active Main Belt Object P/2012 F5 (Gibbs): A Possible Impacted Asteroid*”. 2012, ApJ, 759, 142.
- **Masiero, J.R.**; Mainzer A.; Grav, T.; Bauer, J.; Nugent, C.; Cabrera, M.S.; “*Preliminary Analysis of WISE/NEOWISE 3-Band Cryogenic and Post-Cryogenic Observations of Main Belt Asteroids*”. 2012, ApJL, 759, 8.
- Grav, T.; Mainzer A.; Bauer, J.; **Masiero, J.R.**; Nugent, C.; “*WISE/NEOWISE Observations of the Jovian Trojan Population: Taxonomy*”. 2012, ApJ, 759, 49.
- **Masiero, J.R.**; Mainzer, A.; Grav, T.; Bauer, J.; Jedicke, R.; “*Revising the age for the Baptistina asteroid family using WISE/NEOWISE data*”. 2012, ApJ, 759, 14.
- Bauer, J.M.; Kramer, E., Mainzer, A.K.; Stevenson, R., Grav, T.; **Masiero, J.**; et al. “*WISE/NEOWISE Preliminary Analysis and Highlights of the 67p/Churyumov-Gerasimenko near Nucleus Environ*s”. 2012, ApJ, 758, 18.
- Nugent, C.; Mainzer, A.; **Masiero, J.**; Grav, T.; Bauer, J.; “*The Yarkovsky Drift’s Influence on NEAs: Trends and Predictions with NEOWISE Measurements*”. 2012, AJ, 144, 75.
- Mainzer, A.; Grav, T.; **Masiero, J.**; Bauer, J.; et al; “*Characterizing Subpopulations within the near-Earth Objects with NEOWISE: Preliminary Results*”. 2012, ApJ, 752, 110.
- **Masiero, J.**; Mainzer, A.; Grav, T.; et al; “*A revised asteroid polarization-albedo relationship using WISE/NEOWISE data*”. 2012, ApJ, 749, 104.
- Bauer, J.M.; Mainzer, A.K.; Grav, T.; Walker, R.G.; **Masiero, J.**; et al. “*WISE/NEOWISE observations of Active Bodies in the Main Belt*”. 2012, ApJ, 747, 49.
- Mainzer, A.; **Masiero, J.**; Grav, T.; Bauer, J.; et al; “*NEOWISE Studies of Asteroids with Sloan Photometry: Preliminary Results*”. 2011, ApJ, 745, 7.
- Grav, T.; Mainzer, A.; Bauer, J.; **Masiero, J.**; et al; “*WISE/NEOWISE Observations of the Hilda Population: Preliminary Results*”. 2011, ApJ, 744, 197.
- Mainzer, A.; Grav, T.; Bauer, J.; **Masiero, J.**; et al; “*NEOWISE Observations of Near-Earth Objects: Preliminary Results*”. 2011, ApJ, 743, 156.
- Grav, T.; Mainzer, A.; Bauer, J.; **Masiero, J.**; et al; “*WISE/NEOWISE Observations of the Jovian Trojans: Preliminary Results*”. 2011, ApJ, 742, 40.
- Mainzer, A.; Grav, T.; **Masiero, J.**; Bauer, J.; et al; “*NEOWISE Studies of Spectrophotometrically Classified Asteroids: Preliminary Results*”. 2011, ApJ, 741, 90.
- **Masiero, J.**; Mainzer, A.; Grav, T.; et al; “*Main Belt Asteroids with WISE/NEOWISE I: Preliminary Albedos and Diameters*”. 2011, ApJ, 741, 68.
- Sonnett, S.; Kleyna, J.; Jedicke, R. & **Masiero, J.** “*Limits on the Size and Orbit Distribution of Main Belt Comets*”. 2011, Icarus, 215, 534.
- Bauer, J.M.; Walker, R.G.; Mainzer, A.K.; **Masiero, J.**; et al. “*WISE/NEOWISE observations of comet 103P/Hartley 2*”. 2011, ApJ, 738, 171.
- Mainzer, A.; Grav, T.; **Masiero, J.**; et al; “*Thermal Model Calibration for Minor Planets Observed with WISE/NEOWISE: Comparison with Infrared Astronomical Satellite*”. 2011, ApJL, 737, 9.
- Mainzer, A.; Grav, T.; **Masiero, J.**; et al; “*Thermal Model Calibration for Minor Planets*

Observed with Wide-field Infrared Survey Explorer/NEOWISE". 2011, ApJ, 736, 100.

- Mainzer, A.; Bauer, J.; Grav, T.; **Masiero, J.**; et al; "Preliminary Results from NEOWISE: An Enhancement to the Wide-field Infrared Survey Explorer for Solar System Science". 2011, ApJ, 731, 53.
- **Masiero, J.** "Albedo heterogeneity on the surface of (1943) Anteros". 2010, Icarus, 207, 795.
- Levesque, Emily M.; Bloom, Joshua S.; ...; **Masiero, Joseph**; ... "GRB090426: the environment of a rest-frame 0.35-s gamma-ray burst at a redshift of 2.609". 2010, MNRAS, 401, 963.
- **Masiero, J.**; Hartzell, C.; Scheeres, D.J. "The effect of the dust size distribution on asteroid polarization". 2009, AJ, 138, 1557.
- Price, A.; **Masiero, J.**; et al. "Polarimetry and the Long Awaited Superoutburst of BZ UMa". 2009, PASP, 121, 1205.
- **Masiero, J.**; Jedicke, R.; Ďurech, J.; Gwyn, S.; Denneau, L.; Larsen, J. "The Thousand Asteroid Light Curve Survey". 2009, Icarus, 204, 145.
- Richter, Philipp; Charlton, Jane C.; Fangano, Alessio P. M.; Ben Bekhti, Nadya; **Masiero, Joseph R.** "A population of weak metal-line absorbers surrounding the Milky Way". 2009, ApJ, 695, 1613.
- **Masiero, J.**; Cellino, A. "Polarization of asteroid (387) Aquitania: the newest member of a class of large inversion angle asteroids". 2009, Icarus, 199, 333.
- Milutinovic, N.; Misawa, T.; Lynch, R. S.; **Masiero, J. R.**; Palma, C.; Charlton, J. C.; Kirkman, D.; Bockenhauer, S.; Tytler, D. "A Catalog of Absorption Lines in Eight HST/STIS E230M $1.0 < z < 1.7$ Quasar Spectra". 2007, MNRAS, 382, 1094.
- **Masiero, J.**; Hodapp, K.; Harrington, D.; Lin, H. "Commissioning of the Dual-Beam Imaging Polarimeter for the UH 88-inch telescope". 2007, PASP, 119, 1126.
- Maybhate, Aparna; **Masiero, Joseph**; Hibbard, J. E.; Charlton, Jane C.; Palma, Christopher; Knierman, Karen A.; and English, Jayanne. "An HI Threshold for Star Cluster Formation in Tidal Debris". 2007, MNRAS, 381, 59.
- Kubica, J.; Denneau, L.; Grav, T.; Heasley, J.; Jedicke, R.; **Masiero, J.**; Milani, A.; Moore, A.; Tholen, D.; Wainscoat, R.J. "Efficient intra- and inter-night linking of asteroid detections using kd-trees". 2007, Icarus, 189, 151.
- Milutinovic, Nikola; Rigby, Jane R.; **Masiero, Joseph R.**; Lynch, Ryan S.; Palma, Chris; and Charlton, Jane C. "The Nature of Weak MgII Absorbing Structures". 2006, ApJ, 641, 190.
- Narayanan, Anand; Charlton, Jane C.; **Masiero, Joe R.**; and Lynch, Ryan. "A Survey of Analogs to Weak MgII Absorbers in the Present". 2005, ApJ, 632, 92.
- **Masiero, Joseph R.**; Charlton, Jane C.; Ding, J.; Churchill, Christopher W.; and Kacprzak, G. "Models of Five Absorption Line Systems Along the Line of Sight Toward PG 0117+213." 2005, ApJ, 623, 57.
- Ganguly, Rajib; **Masiero, Joseph**; Charlton, Jane C.; and Sembach, Ken R. "An Intrinsic Absorption Complex Toward RXJ1230.8+0115: Geometry and Photoionization Conditions." 2003, ApJ, 598, 922-934.

Conference Proceedings, White Papers and non-refereed publications

- Co-author on over 300 Minor Planet Electronic Circulars (MPECs) and International Astronomical Union Circulars (IAUCs) describing observations of NEOs, comets, and other interesting small Solar system bodies.
- **Masiero, J.**; Hodapp, K.; Harrington, D.; Lin, H. "Extended Commissioning and Calibration of the Dual-Beam Imaging Polarimeter". 2011, ASPC, 449, 39.
- Clemens, Dan; Andersson, B. -G.; ... **Masiero, Joseph**; ... "O/IR Polarimetry for the 2010 Decade (GAN): Science at the Edge, Sharp Tools for All". 2009, arXiv, 0902.4217.
- Clemens, Dan; Andersson, B. -G.; ... **Masiero, Joseph**; ... "O/IR Polarimetry for the 2010 Decade (PSF): Science at the Edge, Sharp Tools for All". 2009, arXiv, 0902.4220.
- Hines, Dean C.; Packham, Christopher C.; ... **Masiero, Joseph**; ... "O/IR Polarimetry for the 2010 Decade (CGT): Science at the Edge, Sharp Tools for All". 2009, arXiv, 0902.4224.
- Lazarian, Alex; Clemens, Dan; ... **Masiero, Joseph**; ... "Understanding Polarized Foreground from Dust: Towards Reliable Measurements of CMB Polarization". 2009, arXiv,

0902.4226.

- **Masiero, J.** “*A New Instrument for the UH 2.2-meter Telescope*”. 2007, IfA Newsletter, 25, 1.
- Stubbs, C. W.; Slater, S. K.; Brown, Y. J.; Sherman, D.; Smith, R. C.; Suntzeff, N.; Saha, A.; Tonry, J. L.; **Masiero, J. R.**; Rodney, S. “*Preliminary Results from Detector-Based Throughput Calibration of the CTIO Mosaic Imager and Blanco Telescope Using a Tunable Laser*”. 2007, ASPC, 364, 373.
- **Masiero, Joseph R.**; Jedicke, Robert; Price, Paul A.; Kubica, Jeremy; Heasley, James. “*The MegaCam g' Asteroid Survey*”. 2006, 699 Final Report.
- Slater, S.; Stubbs, C. W.; Tonry, J. L.; **Masiero, J. R.**; Smith, R. C. “*Calibration techniques for next-generation astronomical systems*”. 2006, SPIE, 6269E, 66.
- Kubica, J.; **Masiero, J.**; Moore, A.; Jedicke, R.; and Connolly, A. “*Variable KD-Tree Algorithms for Spatial Pattern Search and Discovery*”. 2005, Advances in Neural Information Processing Systems, 433.
- Churchill, Christopher W.; Charlton, Jane C.; and **Masiero, Joseph R.** “*Mapping Metal-Enriched High Velocity Clouds to Very Low HI Column Densities*.” 2002, ASPC, 254, 236.

RESEARCH TALKS

- **02/15/13:** iPLEX lunch talk, University of California, Los Angeles, “*Asteroid Families as a Probe of the History of the Solar System*”
- **01/17/13:** Invited Colloquium, University of British Columbia, “*The WISE view of the Solar System*”
- **10/15/12:** AAS Division of Planetary Science Meeting 2012, “*Revising the age for the Baptistina Family using WISE/NEOWISE data*”
- **05/16/12:** Asteroids, Comets, and Meteors Conference 2012, “*Age dating the families of the Main Belt using diameters and albedos from NEOWISE/WISE*”
- **03/09/12:** NOAO Lunch Talk, “*Recent Results from the NEOWISE Mid-IR Solar System Survey*”
- **03/07/12:** NASA Jet Propulsion Laboratory Seminar, “*Asteroid Families: Compositions, Collisions, and the Chronology of the Solar System*”
- **10/04/11:** Joint European Planetary Science Conference/AAS Division of Planetary Science Meeting 2011, “*Investigating Main Belt asteroids with WISE/NEOWISE*”
- **03/07/11:** Lunar and Planetary Science Conference 2011, “*WISE results for the Main Belt Asteroids*”
- **12/06/10:** WISE Science Team Meeting, “*Main Belt Asteroid Results*”
- **10/19/10:** NOAO Coffee Discussion, “*WISE: The Solar System and Beyond*”
- **10/14/10:** JPL Postdoc Seminar, “*WISE Observations of Main Belt Asteroids*”
- **10/08/10:** AAS Division of Planetary Science Meeting 2010, “*WISE Albedos for Over 100,000 Thousand Main Belt Asteroids*”
- **10/22/09:** UCLA Lunch Talk, “*The Thousand Asteroid Light Curve Survey*”
- **09/25/09:** Ph.D. Defense, “*Light Curve Signatures of the Physical Properties of Small Asteroids*”
- **05/08/09:** IfA Coffee Talk, “*Dust in the Wind*”
- **03/20/09:** Southwest Research Institute Colloquium, “*The Thousand Asteroid Light Curve Survey*”
- **11/21/08:** Canada-France-Hawaii Telescope Seminar, “*The Thousand Asteroid Light Curve Survey*”
- **07/15/08:** Asteroids, Comets, Meteors 2008, “*Results from the Thousand Asteroid Light Curve Survey*”
- **07/07/08:** Astronomical Polarimetry 2008, “*The Dual-Beam Imaging Polarimeter: A New Instrument for the UH 2.2 m Telescope*”
- **09/14/07:** IfA Coffee Talk, “*The Dual-Beam Imaging Polarimeter*”
- **09/05/07:** Grad Student/Post-doc Seminar, “*The Dual-Beam Imaging Polarimeter*”
- **06/29/07:** VII Workshop on Catastrophic Disruption in the Solar System, “*The Thousand Asteroid Light Curve Survey. Preliminary Results*”
- **04/12/07:** Thesis Proposal, “*Using Rotation and Polarization to Probe the Composition and Surface Properties of Main Belt Asteroids*”

- **12/14/06:** Lunchtalk presentation to the US Naval Academy Physics and Astronomy Dept, “*The Thousand Asteroid Light Curve Survey*”
- **11/02/06:** Pan-STARRS Moving Object Processing System Critical Design Review: “*Trailed Object Fitting*”
- **10/02/06:** 699 Research Presentation to the IfA, “*The Pan-STARRS Flat-Field Monitor Telescope*”
- **08/18/06:** Center for Star and Planet Formation Research Talk, “*Main Belt Asteroids: Rotation and Polarization*”
- **02/24/06:** 699 Research Presentation to the IfA, “*The MegaCam g' Asteroid Survey*”

PUBLIC TALKS

- **11/05/10:** St. Philip School Reverse Science Fair Day: “*A Universe of Infrared*”
- **02/12-13/08:** Journey Through the Universe, Waiakea Intermediate; Hilo, HI: “*Formation of the Solar System*”
- **06/07/08:** Habitat Rehab Program; Kaneohe, HI: “*Tour of the Solar System*”
- **02/07/08:** Journey Through the Universe, Kapiolani Elementary; Hilo, HI: “*Energy in the Universe*”
- **12/19/07:** Lincoln Elementary School 5th grade; Roxbury, NJ: “*Tour of the Solar System*”
- **08/04/07:** Girl Scout Science Camp; Camp Erdman, HI: “*Aliens in the Solar System?*”
- **01/23/07:** Journey Through the Universe, Waiakea Elementary; Hilo, HI: “*Tour of the Solar System*”
- **12/19/06:** Lincoln Elementary School 5th grade; Roxbury, NJ: “*Tour of the Solar System*”
- **06/17/06:** Habitat Rehab Program; Kaneohe, HI: “*Tour of the Solar System*”
- **12/20/05:** Lincoln Elementary School 5th grade; Roxbury, NJ: “*Tour of the Solar System*”

CONFERENCE POSTERS

- Lunar and Planetary Science Conference, 2010: “*The WISE Survey of the Albedo Distribution of Main Belt Asteroids*” (Preliminary WISE results).
- AAS Division of Planetary Sciences Meeting, 2009: “*Solar System Science with WISE*” (Future Mission Science Objectives).
- AAS Division of Planetary Sciences Meeting, 2007: “*Orbits and Periods: Results from the Thousand Asteroid Light Curve Survey*” (Asteroid rotation, Observed Population Statistics).
- American Astronomical Society Winter Meeting, 2006: “*Pan-STARRS: Main Belt Sky-Plane Density Determination, and Trailed Object Identification*” (Main Belt Asteroid Sky Plane Density, Image Processing Pipeline Efficiency, Trailed Object Identification Efficiency).
- American Astronomical Society Winter Meeting, 2004: “*Super Star Clusters and their Association with the Radio and Optical Tidal Tails of Interacting Galaxies*” (Interacting Galaxies: Optical-HI comparisons).
- American Astronomical Society Winter Meeting, 2003: “*The Recipe for the Extragalactic Soup*” (Quasar Absorption Lines: Intervening System Modeling).
- American Astronomical Society Winter Meeting, 2002: “*The Recipe for a High Velocity Cloud*” (Quasar Absorption Lines: Milky Way High Velocity Cloud Modeling).

OUTREACH

Learning Works visits to Caltech

- Volunteer Presenter

2012-2013

Twenty Wonder Festival of the Mind

- Volunteer

2012

IfA Graduate Education and Public Outreach Committee (GEPOC)

- Volunteer

2004-2009

- Founder/Organizer

2004-2008

- see www.ifa.hawaii.edu/ge poc for more information on GEPOC

IfA Deep Impact Outreach Team

	<ul style="list-style-type: none"> • Oahu Coordinator 	2005
Penn State Astrofest		
	<ul style="list-style-type: none"> • Volunteer • Volunteer Coordinator 	2002-2005 2003
HONORS AND AWARDS		
	<ul style="list-style-type: none"> • Asteroid 8255 Masiero (1981 EZ18) named in honor • NASA Group Achievement Award: NEOWISE team • Honorary Officer, NASA's First Planetary Defense Squadron (Provisional) • NASA Postdoctoral Program Fellowship • Graduated with Distinction and Honors (PSU) • Penn State Eberly College of Science Braddock Scholar • Penn State Schreyer Honors College Scholar 	2009 - 2012 2004 2000 - 2004 2000 - 2004
MEMBERSHIP		
	Committees:	
	<ul style="list-style-type: none"> • Qualifying Exam Committee (elected) • IfA Time Allocation Committee (elected) • Colloquium Committee (appointed) • Graduate Student Representative to the Faculty (elected) • IfA Outreach Committee (as head of GEPOC) 	Fall 2008 2008 Semester 1 1/2008 - 9/2009 10/2007 - 10/2008 2005 - 2008
	Professional Societies:	
	<ul style="list-style-type: none"> • International Astronomical Union • IAU Division III Commission 15 • AAS Division of Planetary Science • Phi Beta Kappa • Golden Key Honor Society • National Society of Collegiate Scholars • American Astronomical Society 	from 2012 from 2012 from 2007 from 2005 from 2002 from 2001 from 2001
ACTIVITIES		
	<ul style="list-style-type: none"> • Arroyo Food Co-op, Board of Directors, Director & Secretary • Bagpiper with the Celtic Pipes and Drums of Hawaii • Wisdom Factors International (Non-Profit), Director & Secretary • River of Life Mission, Volunteer • University of Hawaii Graduate Student Organization, Executive Council - At-Large • Penn State Soaring Club, President • No Refund Theatre's "Working", Production Manager 	05/2011 - present 01/2008 - 09/2009 08/2007 - 09/2009 02/2007 - 09/2009 05/2006 - 05/2007 12/2002 - 04/2004 Fall 2003